

I. SOIL PROPERTIES

1. **Parent material** (5 points)
 - A Weathered bedrock E Loess
 - B Till AB Alluvium
 - C Outwash/lacust. Deposit AC Local overwash
 - D Eolian sand
2. **Slope** (5 points)
 - A 0-2% E 19-25%
 - B 3-6% AB 26-35%
 - C 7-12% AC >35%
 - D 13-18%
3. **Landform** (5 points)
 - A Upland hillslope AB Outwash landfm., hillslope
 - B Upland swell AC Outwash landfm., swell
 - C Upland depr./flat AD Outwash landfm., dep./flat
 - D Dune AE Flood plain
 - E Filled depression
4. **Color, surface** (5 points)
 - A Dark
 - B Grey
 - C Brownish
5. **Erosion** (5 points)
 - A None to slight
 - B Moderate
 - C Severe
6. **Texture, surface** (5 points)
 - A Sandy (S, LS)
 - B Moderately sandy (SL)
 - C Medium (L, SiL, Si)
 - D Moderately clayey (SCL, CL, SiCL)
 - E Clayey (SC, C, SiC)

S = Sand(y), Si = Silt(y), C = Clay, L = Loam(y)
7. **Texture, subsoil** (5 points)
 - A Sandy (S, LS)
 - B Moderately sandy (SL)
 - C Medium (L, SiL, Si)
 - D Moderately clayey (SCL, CL, SiCL)
 - E Clayey (SC, C, SiC)
8. **Natural soil drainage** (5 points)
 - A Poorly
 - B Somewhat poorly
 - C Moderately well
 - D Well
9. **Limiting layer** (5 points)
 - A Bedrock, 0-20 in.
 - B Bedrock, 21-40 in.
 - C Dense till, 0-20 in.
 - D Dense till, 21-40 in.
 - E Fragipan, 0-20 in.
 - AB Fragipan, 21-40 in.
 - AC Coarse sand & gravel, 0-20 in.
 - AD Coarse sand & gravel, 21-40 in.
 - AE None within 40 in.

Contestant No. _____
Site No. _____
Soil series _____

II. CAPABILITY, POTENTIAL, AND PRACTICES

(3 points each)

YES NO

- A. **Prime farmland**
 51. A B
- B. **High potential for degradation**
 52. A B Soil erosion by water
 53. A B Soil erosion by wind
 54. A B Soil compaction
 55. A B Groundwater pollution
 56. A B Surface water pollution
- C. **Vegetation and buffer practices**
 57. A B Natural vegetation
 58. A B Grassed waterways
 59. A B Windbreaks
 60. A B Possible filter strips
- D. **Tillage and cropping practices**
 61. A B Permanent pasture
 62. A B Crop rotation
 63. A B No-till with cover crop
 64. A B No-till
 65. A B Clean tillage
- E. **Water management practices**
 66. A B Preserve as wetland
 67. A B Artificial drainage
 68. A B Irrigation
 69. A B Parallel terraces
- F. **Chemical and fertility practices**
 70. Nitrogen appl.: A, Low B, Medium C, High
 71. Phosphorus: A, Apply B, Do not apply C, Deplete
 72. Potassium: A, Apply B, Do not apply C, Deplete
 73. Lime: A, Apply B, Do not apply

Score		
Part I, 1-9	(45 pts. possible)	_____
Part II, 51-73	(69 pts. possible)	_____
Total	(114 pts. possible)	_____

Current land use (0 points)

- Naturally vegetated land
- Agricultural or developed land